PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	David M. Center, et al.	**Examiner:**	B. Bunner
Serial No.:	09/368,630	**Art Unit:**	1647
Filed:	August 5, 1999	**Docket:**	12875

#20
B.g.J
12/16/02

For: IL-16 ANTAGONIST PEPTIDES AND DNA ENCODING THE PEPTIDES

Assistant Commissioner for Patents
United States Patent and Trademark Office
Washington, D.C. 20231

DECLARATION OF CHRISTOPHER P. MARTIN UNDER 37 C.F.R. §1.132

Sir:

I, Christopher P. Martin, hereby declare as follows:

1. I hold the position of Chairman at Sedecim Therapeutics, Inc., Concord, MA ("Sedecim"), the exclusive licensee of the above-identified application ("the '630 application").

2. I have reviewed the above-identified application and I am familiar with the subject matter therein. I have been asked to review and comment on issues raised by the Examiner in the Office Action dated June 6, 2002.

3. It is my understanding that the Examiner contends that the specification does not provide any working examples that demonstrate administration of any IL-16 antagonist peptide to any animal for the treatment of any IL-16 mediated pathological disorder. Therefore, the Examiner contends that one skilled in the art would not be able to use a pharmaceutical

composition comprising an IL-16 antagonist peptide, as claimed in the '630 application, without undue experimentation.

4. As support of the enablement of a pharmaceutical composition as claimed in the '630 application, I provide herewith a report (attached hereto as **Exhibit A**) which demonstrates the therapeutic effects of the 8-mer peptide, RRKSLQSK (SEQ ID NO: 24), and the 16-mer peptide, RRKSLQSKETTAAGDS (SEQ ID NO: 33), on antigen-induced early and late airway responses, airway hyperresponsiveness and airway inflammation in allergic sheep.

5. Briefly, the animals were examined to determine baseline dose response curves to aerosol carbachol 1-3 days prior to antigen challenge. Then, on the day of antigen challenge, values of specific lung resistance (SR_L) were measured at baseline and, then, 30 min after drug or vehicle (0.9% saline) treatment. The animals were, then, challenged with Ascaris suum antigen and SR_L was remeasured immediately after challenge, hourly from 1-6 h after challenge and on the half-hour from 6 ½-8 h after challenge. Measurements of SR_L were obtained 24 h after challenge followed by the 24h post- challenge dose response curve.

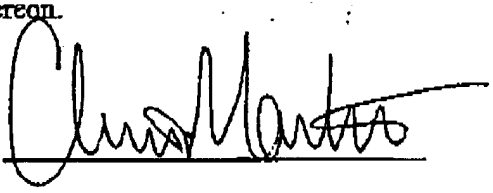
6. The results were illustrated in the figures enclosed in Exhibit A. As can be seen from the top figure for the 16mer, aerosol treatment with 3mg of the 16mer protected the sheep against the antigen-induced late phase airway resistance (or "LAR", an indicator of asthma reaction). Consistent with this protection against the late response was the protection against the antigen-induced airway hyperresponsiveness (or "AHR") (bottom figure for the 16mer). Similar results were obtained with the 8mer peptide.

7. Taken together, these results demonstrate the therapeutic effects of IL-16 antagonist peptides in the treatment of asthma in an appropriate animal model. Significantly, it is observed that the methods used in these experiments, including measurement of airway

mechanics, aerosol delivery, analysis of bronchoalveolar lavage fluid, and quantitating the antigen-induced responses, are all routine in nature and well known to those skilled in the art.

8. The experiments described in the report were sponsored by Sedecim and conducted at the Mount Sinai Medical Center of Florida ("MSMC") under the direction of Dr. William Abraham of the Department of Research at MSMC.

9. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and that those statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature: 

Dated: 5 November 2002